

REMARKS

Claims 1-26 were pending in the present application; however, by this amendment claim 27 has been added. Thus, upon entry of this amendment claims 1-27 will be pending in the present application.

To date, no Notice of Draftsperson's Patent Drawing Review has been received. Applicants respectfully request receipt of this document when it becomes available. Please note that the original drawings filed in the patent application are "formal" drawings.

Claim Objections

Claims 13-20 are objected to as being dependent upon a rejected base claim, but would be allowable if written in independent form including all of the limitations of the base claim and any intervening claims. However, for the reasons discussed below, the independent claim (claim 1) from which claims 13-20 depend is considered to be in condition for allowance. Therefore, rewriting claims 13-20 in independent form would involve unnecessary expense and effort. Accordingly, it is respectfully requested that the objection to claims 13-20 be reconsidered and withdrawn.

35 U.S.C. § 102(e) Rejection

Claims 1-3, 5-7, 11, 12 and 21-26 are rejected under 35 U.S.C. § 102(e) over Shinotsuka (U.S. Patent No. 6,191,408). However, because Shinotsuka fails to disclose all of the limitations of claims 1-3, 5-7, 11, 12, and 21-26, Shinotsuka cannot anticipate these claims.

Specifically, with respect to claim 1 (and claims 2, 3, 5-7, 11, 12 and 21-25 which depend from claim 1), this claim recites:

An image-sensing apparatus comprising:
a solid-state image-sensing device composed of a plurality of pixels individually including photosensitive portions that generate electric signals in accordance with amount of light incident thereon, the solid-state image-sensing device operating selectively either in a first state in which the individual pixels output signals obtained by linearly converting the electric signals generated by the photosensitive portions thereof or in a second state in which the individual pixels output signals obtained by natural-logarithmically converting the electric signals generated by the photosensitive portions thereof; and
a generator for generating a switching signal for switching the solid-state image-sensing device between the first and second states.

(Emphasis added). Thus, claim 1 includes a generator for generating a signal for switching an image-sensing device between a first, linear conversion state and a second, logarithmic conversion state. It is respectfully submitted that Shinotsuka fails to disclose a generator as recited in claim 1.

Shinotsuka relates to a photosensor processing apparatus for receiving output voltages from photosensors of an image sensor. The photosensors operate in a linear function region for lower degrees of incident illumination and a logarithmic function region for higher degrees of incident illumination as shown in Fig. 3. An inflection point separates the linear and logarithmic function regions. Slight variations among the photosensors result in variation in output signals for a given amount of incident illumination. This results in a fixed pattern noise for incident illumination near the inflection point. Therefore, the point of Shinotsuka is to store compensation data for each photosensor to use for correcting image data at or near the inflection point as a means for reducing fixed pattern noise. However, Shinotsuka does not address generating a signal to switch an image-sensing device between linear and logarithmic states. Rather, Shinotsuka merely discloses photosensors that transition between linear and logarithmic conversion based on an intensity of incident illumination. In other words, Shinotsuka fails to disclose or suggest a generator for generating a signal for switching an image-sensing device between a first, linear conversion state and a second, logarithmic conversion state as recited in claim 1. Since Shinotsuka fails to disclose all of the limitations of claim 1,

Shinotsuka cannot anticipate claim 1, or claims 2, 3, 5-7, 11, 12 and 21-25 which depend from claim 1.

With respect to claim 26, this claim recites:

An image-sensing apparatus comprising:
a plurality of pixels individually including photosensitive portions that generate electric signals in accordance with amount of light incident thereon;
a conversion portion for logarithmically converting the electric signals generated by the photosensitive portions;
an evaluation portion for **evaluating brightness distribution** of a subject to be shot on a basis of a signal output from the conversion portion; and
a determination portion for **determining a brightness range** of the subject to be shot on a basis of the brightness distribution evaluated by the evaluation portion.

(Emphasis added). Thus, claim 2 includes an evaluation portion for evaluating brightness distribution of a subject and also includes a determination portion for determining a brightness range of the subject. It is respectfully submitted that Shinotsuka fails to disclose an evaluation portion and a determination portion as recited in claim 26.

With respect to the evaluation portion, the Office Action alleges that Shinotsuka discloses this limitation at Fig. 5, element 8 and col. 6, lines 20-37. This allegation is traversed. The element 8 of Fig. 5 is a data comparator which Shinotsuka discloses is provided for comparing a sensor output and inflection point data for each photosensor in order to determine whether the sensor output corresponds with the inflection point for the respective sensor. (Shinotsuka, col. 7, lines 9-18). Thus, the data comparator (element 8) does not evaluate a brightness *distribution* of a subject, rather the data comparator makes independent judgements for outputs of each photosensor without any function or capability for making any kind of determination related to a distribution of brightness levels. The discussion at col. 6, lines 20-37 of Shinotsuka provides a general overview of the signal processing apparatus, pointing out that corrections are made for outputs of

individual photosensors (e.g., lines 31-32). However, the discussion at col. 6, lines 20-37 of Shinotsuka fails to address evaluating a brightness distribution.

With respect to the determination portion, the Office Action alleges that Shinotsuka discloses this limitation at Fig. 5, element 11. This allegation is also traversed. The element 11 of Fig. 5 is a reference inflection point input device "such as a keyboard." (Shinotsuka, col. 7, lines 54-55). The inflection point input device (element 11) is provided for supplying a reference inflection point that can be set at any value. (Shinotsuka, col. 7, lines 59-63). Thus, Shinotsuka fails to disclose that the reference inflection point device determines a brightness range, particularly on a basis of a brightness distribution evaluated by an evaluation portion.

Therefore, for at least the reasons discussed above, Shinotsuka fails to disclose all of the limitations of claim 26, and as such Shinotsuka cannot anticipate claim 26.

Accordingly, it is respectfully requested that the rejection of claims 1-3, 5-7, 11, 12 and 21-26 under 35 U.S.C. § 102(e) over Shinotsuka be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

Claims 4 and 8-10 are rejected under 35 U.S.C. § 103(a) over Shinotsuka. However, because Shinotsuka fails to disclose or suggest all of the limitations of claims 4 and 8-10, Shinotsuka cannot render these claims obvious.

Specifically, claims 4 and 8-10 depend from claim 1 which, as discussed above, includes a generator for generating a signal for switching an image-sensing device between a first, linear conversion state and a second, logarithmic conversion state. As also pointed out above, Shinotsuka fails to disclose or suggest a generator for generating a signal for switching an image-sensing device between a first, linear conversion state and a second, logarithmic conversion state as recited in claim 1. Since Shinotsuka fails to

disclose or suggest all of the limitations of claim 1, Shinotsuka cannot render obvious claim 1, or claims 4 and 8-10 which depend from claim 1.

Accordingly, it is respectfully requested that the rejection of claims 4 and 8-10 under 35 U.S.C. § 103(a) over Shinotsuka be reconsidered and withdrawn.

New Claim

By this amendment, new claim 27 has been added to provide a more adequate basis for protection of the invention. New claim 27 recites in part "a generator for generating a switching signal for selecting one of the plurality of output states based on an output from the solid-state image-sensing device." Thus, new claim 27 is considered to patentably distinguish the prior art for at least the same reasons discussed above in connection with claim 1.

CONCLUSION

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment increases the number of independent claims by one from two to three and increases the total number of claims by one from twenty-six to twenty-seven, but does not present any multiple dependency claims. Accordingly, a Response Transmittal and Fee Authorization form authorizing the amount of \$18.00 to be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Application No. 09/602,876
Amendment dated April 16, 2004
Reply to Office Action of January 16, 2004

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any fee required for such Petition for Extension of Time, and any other fee required by this document, other than the issue fee, and not submitted herewith, should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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